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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HUYNH, PHUONG N

ART UNIT	PAPER NUMBER
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1644

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/005,907	Applicant(s) NOCKA ET AL.	
	Examiner Phuong Huynh	Art Unit 1644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE One MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-71 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-71 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. | 6) <input type="checkbox"/> Other: _____. |

Art Unit: 1644

DETAILED ACTION

I. The location of your application in the PTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 1644, Group 1640, Technology Center 1600.

II. Claims 1-71 are pending.

Election/Restrictions

III. Restriction to one of the following inventions is required under 35 U.S.C. 121:

1. Claims 1-5, 23-29 and 49, drawn to an **isolated nucleic acid molecule** encoding the amino acid sequence of **SEQ ID NO: 2**, host cell comprising said polynucleotide, a method of producing said polypeptide, and a composition comprising said nucleic acid molecule, classified in class 526, subclass 23.1; class 536, subclass 24.1, and class 435, subclass 252.3.
2. Claims 1-2, 6-11, 23-29 and 49, drawn to an **isolated nucleic acid molecule** encoding the amino acid sequence of **SEQ ID NO: 4**, host cell comprising said polynucleotide, a method of producing said polypeptide, and a composition comprising said nucleic acid molecule, classified in class 526, subclass 23.1; class 536, subclass 24.1, and class 435, subclass 252.3.
3. Claims 1-2, 6-11, 23-29 and 49, drawn to an **isolated nucleic acid molecule** encoding the amino acid sequence of **SEQ ID NO: 5**, host cell comprising said polynucleotide, a method of producing said polypeptide, and a composition comprising said nucleic acid molecule, classified in class 526, subclass 23.1; class 536, subclass 24.1, and class 435, subclass 252.3.
4. Claims 1-2, 12-14, 23-29 and 49, drawn to an **isolated nucleic acid molecule** encoding the amino acid sequence of **SEQ ID NO: 7**, host cell comprising said polynucleotide, a method of producing said polypeptide, and a composition comprising said nucleic acid

molecule, classified in class 526, subclass 23.1; class 536, subclass 24.1, and class 435, subclass 252.3.

5. Claims 1-2, 15-17, 23-29 and 49, drawn to an **isolated nucleic acid molecule** encoding the amino acid sequence of **SEQ ID NO: 9**, host cell comprising said polynucleotide, a method of producing said polypeptide, and a composition comprising said nucleic acid molecule, classified in class 526, subclass 23.1; class 536, subclass 24.1, and class 435, subclass 252.3.
6. Claims 1-2, 18-20, 23-29 and 49, drawn to an **isolated nucleic acid molecule** encoding the amino acid sequence of **SEQ ID NO: 11**, host cell comprising said polynucleotide, a method of producing said polypeptide, and a composition comprising said nucleic acid molecule, classified in class 526, subclass 23.1; class 536, subclass 24.1, and class 435, subclass 252.3.
7. Claims 1-2, 21-29 and 49 drawn to an **isolated nucleic acid molecule** encoding the amino acid sequence of **SEQ ID NO: 13**, host cell comprising said polynucleotide, and a method of producing said polypeptide, and a composition comprising said nucleic acid molecule, classified in class 526, subclass 23.1; class 536, subclass 24.1, and class 435, subclass 252.3.
8. Claims 30-32, drawn to an isolated **polypeptide** comprising the amino acid sequence of **SEQ IDNO: 2**, classified in class 530, subclass 350.
9. Claims 30-32, drawn to an isolated **polypeptide** comprising the amino acid sequence of **SEQ ID NO: 4**, classified in class 530, subclass 350.
10. Claims 30-32, drawn to an isolated **polypeptide** comprising the amino acid sequence of **SEQ ID NO: 5**, classified in class 530, subclass 350.
11. Claims 30-32, drawn to an isolated **polypeptide** comprising the amino acid sequence of **SEQ ID NO: 7**, classified in class 530, subclass 350.

12. Claims 30-32, drawn to an isolated **polypeptide** comprising the amino acid sequence of **SEQ ID NO: 9**, classified in class 530, subclass 350.
13. Claims 30-32, drawn to an isolated **polypeptide** comprising the amino acid sequence of **SEQ ID NO: 11**, classified in class 530, subclass 350.
14. Claims 30-32, drawn to an isolated **polypeptide** comprising the amino acid sequence of **SEQ ID NO: 13**, classified in class 530, subclass 350.
15. Claims 33-34, drawn to an **antibody** that binds specifically binds to an isolated polypeptide comprising the amino acid sequence of **SEQ ID NO: 2**, classified in Class 530, 387.1.
16. Claims 33-34, drawn to an **antibody** that binds specifically binds to an isolated polypeptide comprising the amino acid sequence of **SEQ ID NO: 4**, classified in Class 530, 387.1.
17. Claims 33-34, drawn to an **antibody** that binds specifically binds to an isolated polypeptide comprising the amino acid sequence of **SEQ ID NO: 5**, classified in Class 530, 387.1.
18. Claims 33-34, drawn to an **antibody** that binds specifically binds to an isolated **polypeptide** comprising the amino acid sequence of **SEQ ID NO: 7**, classified in Class 530, 387.1.
19. Claims 33-34, drawn to an **antibody** that binds specifically binds to an isolated polypeptide comprising the amino acid sequence of **SEQ ID NO: 9**, classified in Class 530, 387.1.

20. Claims 33-34, drawn to an **antibody** that binds specifically binds to an isolated polypeptide comprising the amino acid sequence of **SEQ ID NO: 11**, classified in Class 530, 387.1.
21. Claims 33-34, drawn to an **antibody** that binds specifically binds to an isolated polypeptide comprising the amino acid sequence of **SEQ ID NO: 13**, classified in Class 530, 387.1.
22. Claim 35, drawn to a **method of identifying an agent which modulates the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 2** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 6.
23. Claim 35, drawn to a **method of identifying an agent which modulates the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 4** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 6.
24. Claim 35, drawn to a **method of identifying an agent which modulates the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 5** using cells which express the nucleic acid to the agent, classified
25. Claim 35, drawn to a **method of identifying an agent which modulates the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 7** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 6.
26. Claim 35, drawn to a **method of identifying an agent which modulates the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 9** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 6.

27. Claim 35, drawn to a **method of identifying an agent which modulates the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 11** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 6.
28. Claim 35, drawn to a **method of identifying an agent which modulates the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 13** using cells which express the nucleic acid to the agent, classified Class 435, subclass 6.
29. Claims 36-37, drawn to a **method of identifying an agent which modulates the expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 2** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 7.8.
30. Claims 36-37, drawn to a **method of identifying an agent which modulates the expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 4** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 7.8.
31. Claims 36-37, drawn to a **method of identifying an agent which modulates the expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 5** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 7.8.
32. Claims 36-37, drawn to a **method of identifying an agent which modulates the expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 7** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 7.8.
33. Claims 36-37, drawn to a **method of identifying an agent which modulates the expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 9** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 7.8.

34. Claims 36-37, drawn to a **method of identifying an agent which modulates the expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 11** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 7.8.
35. Claims 36-37, drawn to a **method of identifying an agent which modulates the expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 13** using cells which express the nucleic acid to the agent, classified in Class 435, subclass 7.8.
36. Claim 38, drawn to a **method of identifying binding partners** for a protein comprising the amino acid sequence of **SEQ ID NO: 2**, classified in Class 435 subclass 7.8.
37. Claim 38, drawn to a **method of identifying binding partners** for a protein comprising the amino acid sequence of **SEQ ID NO: 4**, classified in Class 435, subclass 7.8.
38. Claim 38, drawn to a **method of identifying binding partners** for a protein comprising the amino acid sequence of **SEQ ID NO: 5**, classified in Class 435, subclass 7.8
39. Claim 38, drawn to a **method of identifying binding partners** for a protein comprising the amino acid sequence of **SEQ ID NO: 7**, classified in Class 435, subclass 7.8.
40. Claim 38, drawn to a **method of identifying binding partners** for a protein comprising the amino acid sequence of **SEQ ID NO: 9**, classified in Class 435, subclass 7.8.
41. Claim 38, drawn to a **method of identifying binding partners** for a protein comprising the amino acid sequence of **SEQ ID NO: 11**, classified in Class 435, subclass 7.8.
42. Claim 38, drawn to a **method of identifying binding partners for a protein** comprising the amino acid sequence of **SEQ ID NO: 13**, classified in Class 435, subclass 7.8.

43. Claim 39, drawn to a **method of modulating the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 2** comprising administering an effective amount of an agent which modulates the expression of said nucleic acid, classified in Class 435, subclass 6.
44. Claim 39, drawn to a **method of modulating the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 4** comprising administering an effective amount of an agent which modulates the expression of said nucleic acid, classified in Class 435, subclass 6.
45. Claim 39, drawn to a **method of modulating the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 5** comprising administering an effective amount of an agent which modulates the expression of said nucleic acid, classified in Class 435, subclass 6.
46. Claim 39, drawn to a **method of modulating the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 7** comprising administering an effective amount of an agent which modulates the expression of said nucleic acid, classified in Class 435, subclass 6.
47. Claim 39, drawn to a **method of modulating the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 9** comprising administering an effective amount of an agent which modulates the expression of said nucleic acid, classified in Class 435, subclass 6.
48. Claim 39, drawn to a **method of modulating the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 11** comprising administering an effective amount of an agent which modulates the expression of said nucleic acid, classified in Class 435, subclass 6.
50. Claim 39, drawn to a **method of modulating the expression of a nucleic acid** encoding a protein comprising the amino acid sequence of **SEQ ID NO: 13** comprising

administering an effective amount of an agent which modulates the expression of said nucleic acid, classified in Class 435, subclass 6.

51. Claim 40, drawn to a **method of modulating at least one activity of a protein** comprising **SEQ ID NO: 2**, classified in Class 435, subclass 21.
52. Claim 40, drawn to a **method of modulating at least one activity of a protein** comprising **SEQ ID NO: 4**, classified in Class 435, subclass 21.
53. Claim 40, drawn to a **method of modulating at least one activity of a protein** comprising **SEQ ID NO: 5**, classified in Class 435, subclass 21.
54. Claim 40, drawn to a **method of modulating at least one activity of a protein** comprising **SEQ ID NO: 7**, classified in Class 435, subclass 21.
55. Claim 40, drawn to a **method of modulating at least one activity of a protein** comprising **SEQ ID NO: 9**, classified in Class 435, subclass 21.
56. Claim 40, drawn to a **method of modulating at least one activity of a protein** comprising **SEQ ID NO: 11**, classified in Class 435, subclass 21.
57. Claim 40, drawn to a **method of modulating at least one activity of a protein** comprising **SEQ ID NO: 13**, classified in Class 435, subclass 21.
58. Claims 41-42, drawn to a **non-human transgenic animal** containing the nucleic acid molecule of **SEQ ID NO: 1**, classified in Class 800, subclass 21.
59. Claims 41-42, drawn to a **non-human transgenic animal** containing the nucleic acid molecule of **SEQ ID NO: 3**, classified in Class 800, subclass 21.
60. Claims 41-42, drawn to a **non-human transgenic animal** containing the nucleic acid molecule of **SEQ ID NO: 6**, classified in Class 800, subclass 21.

61. Claims 41-42, drawn to a **non-human transgenic animal** containing the nucleic acid molecule of **SEQ ID NO: 8**, classified in Class 800, subclass 21.
62. Claims 41-42, drawn to a **non-human transgenic animal** containing the nucleic acid molecule of **SEQ ID NO: 10**, classified in Class 800, subclass 21.
63. Claims 41-42, drawn to a **non-human transgenic animal** containing the nucleic acid molecule of **SEQ ID NO: 12**, classified in Class 800, subclass 21.
64. Claims 43-48, drawn to a **method of diagnosing a disease state** in a subject comprising determining the level of expression of **nucleic acid molecule of SEQ ID NO: 1**, classified in Class 435, subclass 9.1.
65. Claims 43-48, drawn to a **method of diagnosing a disease state** in a subject comprising determining the level of expression of nucleic acid molecule of **SEQ ID NO: 3**, classified in Class 435, subclass 9.1.
66. Claims 43-48, drawn to a **method of diagnosing a disease state** in a subject comprising determining the level of expression of nucleic acid molecule of **SEQ ID NO: 6**, classified in Class 435, subclass 9.1.
67. Claims 43-48, drawn to a **method of diagnosing a disease state** in a subject comprising determining the level of expression of nucleic acid molecule of **SEQ ID NO: 8**, classified in Class 435, subclass 9.1.
68. Claims 43-48, drawn to a **method of diagnosing a disease state** in a subject comprising determining the level of expression of nucleic acid molecule of **SEQ ID NO: 10**, classified in Class 435, subclass 9.1.

69. Claims 43-48, drawn to a **method of diagnosing a disease state** in a subject comprising determining the level of expression of nucleic acid molecule of **SEQ ID NO: 12**, classified in Class 435, subclass 9.1.
70. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 2**, Classified in Class 514, subclass 44.
71. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 4**, Classified in Class 514, subclass 44.
72. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 5**, Classified in Class 514, subclass 44.
73. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering nucleic molecule that encodes the amino acid sequence of **SEQ ID NO: 7**, Classified in Class 514, subclass 44.
74. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering nucleic molecule that encodes the amino acid sequence of **SEQ ID NO: 9**, Classified in Class 514, subclass 44.
75. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering nucleic molecule that encodes the amino acid sequence of **SEQ ID NO: 11**, Classified in Class 514, subclass 44.
76. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering nucleic molecule that encodes the amino acid sequence of **SEQ ID NO: 13**, Classified in Class 514, subclass 44.

77. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **agonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 2**, Classified in Class 514, subclass 44.
78. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **agonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 4**, Classified in Class 514, subclass 44.
79. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **agonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 5**, Classified in Class 514, subclass 44.
80. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **agonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 7**, Classified in Class 514, subclass 44.
81. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **agonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 9**, Classified in Class 514, subclass 44.
82. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **agonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 11**, Classified in Class 514, subclass 44.
83. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **agonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 13**, Classified in Class 514, subclass 44.
84. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **antagonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 2**, Classified in Class 514, subclass 44.

85. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **antagonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 4**, Classified in Class 514, subclass 44.
86. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **antagonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 5**, Classified in Class 514, subclass 44.
87. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **antagonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 7**, Classified in Class 514, subclass 44.
88. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **antagonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 9**, Classified in Class 514, subclass 44.
89. Claims 50-55, drawn to a **method for the treatment or prevention of allergic hypersensitivity** comprising administering **antagonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 11**, Classified in Class 514, subclass 44.
90. Claims 50-55, drawn to a method for the **treatment or prevention of allergic hypersensitivity** comprising administering **antagonist of the nucleic molecule** that encodes the amino acid sequence of **SEQ ID NO: 13**, Classified in Class 514, subclass 44.
91. Claims 56-63, and 69, drawn to a **computer system** comprising a database containing information identifying the expression level in a tissue or at least one mast cell of a set of nucleic acids comprising at least one nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, 3, 6, 8, 10, and 12 or a complement thereof and a user interface to view the information, classified in Class 435, subclass 1.

92. Claims 64-68, drawn to a **method of using the computer system** comprising a database containing information identifying the expression level in a tissue or at least one mast cell of a set of nucleic acids comprising at least one nucleic acid sequence selected from the group consisting of SEQ ID NO: 1, 3, 6, 8, 10, and 12 or a complement thereof and a user interface to view the information, classified in Class 435, subclass 1.
93. Claim 70, drawn to a **method diagnosing a disease state** in a subject comprising determining the level of **expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 2**, classified in Class 435, subclass 9.2.
94. Claim 70, drawn to a **method diagnosing a disease state** in a subject comprising determining the level of **expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 4**, classified in Class 435, subclass 9.2.
95. Claim 70, drawn to a **method diagnosing a disease state** in a subject comprising determining the level of **expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 5**, classified in Class 435, subclass 9.2.
96. Claim 70, drawn to a **method diagnosing a disease state** in a subject comprising determining the level of **expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 7**, classified in Class 435, subclass 9.2.
97. Claim 70, drawn to a **method diagnosing a disease state** in a subject comprising determining the level of **expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 9**, classified in Class 435, subclass 9.2.
98. Claim 70, drawn to a **method diagnosing a disease state** in a subject comprising determining the level of **expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 11**, classified in Class 435, subclass 9.2.

99. Claim 70, drawn to a **method diagnosing a disease state** in a subject comprising determining the level of **expression of a protein** comprising the amino acid sequence of **SEQ ID NO: 13**, classified in Class 435, subclass 9.2.
100. Claim 71, drawn to a **method for the treatment or prevention** of a specific disease state in a subject comprising administering to said subject an effective amount of a **protein comprising the amino acid sequence of SEQ ID NO: 2**, classified in Class 424, subclass 184.1.
101. Claim 71, drawn to a **method for the treatment or prevention** of a specific disease state in a subject comprising administering to said subject an effective amount of a **protein comprising the amino acid sequence of SEQ ID NO: 4**, classified in Class 424, subclass 184.1.
102. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of a **protein comprising the amino acid sequence of SEQ ID NO: 5**, classified in Class 424, subclass 184.1.
103. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of a **protein comprising the amino acid sequence of SEQ ID NO: 7**, classified in Class 424, subclass 184.1.
104. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of a **protein comprising the amino acid sequence of SEQ ID NO: 9**, classified in Class 424, subclass 184.1.
105. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of a

protein comprising the amino acid sequence of SEQ ID NO: 11, classified in Class 424, subclass 184.1.

106. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of a **protein comprising the amino acid sequence of SEQ ID NO: 13**, classified in Class 424, subclass 184.1.
107. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **agonist of a protein comprising the amino acid sequence of SEQ ID NO: 2**, classified in Class 424, subclass 184.1.
108. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **agonist of a protein comprising the amino acid sequence of SEQ ID NO: 4**, classified in Class 424, subclass 184.1.
109. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **agonist of a protein comprising the amino acid sequence of SEQ ID NO: 5**, classified in Class 424, subclass 184.1.
110. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **agonist of a protein comprising the amino acid sequence of SEQ ID NO: 7**, classified in Class 424, subclass 184.1.
111. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **agonist of a protein comprising the amino acid sequence of SEQ ID NO: 9**, classified in Class 424, subclass 184.1.

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112. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **agonist of a protein comprising the amino acid sequence of SEQ ID NO: 11**, classified in Class 424, subclass 184.1.
113. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **agonist of a protein comprising the amino acid sequence of SEQ ID NO: 13**, classified in Class 424, subclass 184.1.
114. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **antagonist of a protein comprising the amino acid sequence of SEQ ID NO: 2**, classified in Class 424, subclass 184.1.
115. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **antagonist of a protein comprising the amino acid sequence of SEQ ID NO: 4**, classified in Class 424, subclass 184.1.
116. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **antagonist of a protein comprising the amino acid sequence of SEQ ID NO: 5**, classified in Class 424, subclass 184.1.
117. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **antagonist of a protein comprising the amino acid sequence of SEQ ID NO: 7**, classified in Class 424, subclass 184.1.

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118. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **antagonist of a protein comprising the amino acid sequence of SEQ ID NO: 9**, classified in Class 424, subclass 184.1.
119. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **antagonist of a protein comprising the amino acid sequence of SEQ ID NO: 11**, classified in Class 424, subclass 184.1.
120. Claim 71, drawn to a **method for the treatment or prevention of a specific disease** state in a subject comprising administering to said subject an effective amount of an **antagonist of a protein comprising the amino acid sequence of SEQ ID NO: 13**, classified in Class 424, subclass 184.1.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Groups 1-21, 58-63, and 91 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the products as claimed (polynucleotide, polypeptide, antibody, agonist and antagonist of said polynucleotide, polypeptide and antibody) differ with respect to their structure, binding specificity, and physiochemical properties. Further, a prior art search also requires a literature search. It is a burden for the examiner to search more than one invention. Therefore, they are patentably distinct.

Inventions of Groups 22-57, 64-90 and 92-120 are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case, the methods as claims such as identifying, treating, diagnosing using distinct products differ with their respect to their process steps and endpoints. Therefore, they are patentably distinct.

Inventions of Groups (1-21, 58-63, and 91) and Groups (22-57, 64-90 and 92-120) are related as product and process of use. The inventions can be shown to be distinct if either or both

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of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case, the products such as antibody agonist or antagonist can be used in materially different process such as treating a specific condition or detection assays. The polypeptide can be used in making antibody. The nucleic acid can be used in materially different process such as making polypeptide knockout animal. Therefore, they are patentably distinct.

4. Because these inventions are distinct for the reasons given above and the searches are not co-extensive, restriction for examination purposes as indicated is proper.
5. Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Huynh "NEON" whose telephone number is (703) 308-4844. The examiner can normally be reached Monday through Friday from 9:00 am to 5:30 p.m. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan can be reached on (703) 308-3973. Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.
7. Papers related to this application may be submitted to Technology Center 1600 by facsimile transmission. Papers should be faxed to Technology Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform to the notice published in the Official Gazette, 1096 OG 30 (November 15, 1989). The CM1 Fax Center telephone number is (703) 305-3014.

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October 6, 2003


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